

Amateur Computer Group of New Jersey NEWS

Volume 40, Number 01

January 2015

ACGNJ Announcements

Main Meeting

Friday, January 2, 2015, 8:00 PM to 10:00 PM.

CANCELLED!

(Due to its proximity to New Year's Day).

Window Pains Meeting

Friday, January 16, 2015, 8:00 PM to 10:00 PM.

Scheduled Topic: Surface Pro 3.

Scheduled Speaker: Wendy Bell.

Election Results

President: Michael Redlich

Vice-President: Wendy Bell

Secretary: Brenda Bell

Treasurer: Malthi Masurekar

Past President: Evan Williams

Director Emeritus: Sol Libes

Directors (Two year term, through end of 2016):

Bob Hawes

David McRitchie

Michael Reagan

Paul Syers

Existing Directors (Through end of 2015):

Scot Jenkins

Gregg McCarthy

John Raff

Frank Warren

(Please see the President's Note on Page 3).



<http://www.acgnj.org>

Founded 1975

This newsletter was made by 100% pure Linux!

Operating System: Ubuntu 12.04 LTS

Desktop Publisher: Scribus 1.3.3.13

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ACGNJ Meetings

For the very latest news on ACGNJ meetings, please visit the ACGNJ Website (www.acgnj.org).

For news from OTHER clubs, please go to:

<http://www.acgnj.org/joomla/>

Main Meeting: ~~Friday, January 2, 8:00 PM~~

CANCELLED! (Too close to New Year's Day).

Lunics (Linux/UNIX): Monday, January 5, 8 PM

Andreas Meyer (lunics (at) acgnj.org)

Board of Directors Meeting: Tues, Jan 6, 7 PM

Mike Redlich (president (at) acgnj.org)

Investing: Thursday, January 8, 8:00 PM

Jim Cooper (jim (at) thecoopers.org).

NJ Gamers: Friday, January 9, 6:00 PM

Gregg McCarthy (greggmajestic (at) gmail.com)

Computer Workshop: **Saturday**, Jan. 10, **1:00 PM**

Bob Hawes (cmp.wrksph (at) acgnj.org).

Layman's Forum: Monday, January 12, 8:00 PM

Matt Skoda (som359 (at) gmail.com)

Java: Tuesday, January 13, 7:30 PM

Mike Redlich (mike (at) redlich.net)

Window Pains: Friday, January 16, 8:00 PM

John Raff (john (at) jraff.com)

Web Browser: Monday, January 19, 7:30 PM

David McRitchie (firefox (at) acgnj.org)

C/C++: Tuesday, January 20, 7:30 PM

Bruce Arnold (barnold (at) ieee.org)

Lunics (Linux/UNIX): Monday, Feb 2, 8 PM

Andreas Meyer (lunics (at) acgnj.org)

Board of Directors Meeting: Tues, Feb 3, 7 PM

Mike Redlich (president (at) acgnj.org)

All meetings, unless otherwise noted, are at the Scotch Plains Rescue Squad, 1916 Bartle Ave, Scotch Plains, New Jersey. Directions and map on last page. 🗺

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Past President	Evan Williams	(908) 359-8070		Frank Warren	(908) 756-1681
			Through 2016	Bob Hawes	
				David McRitchie	
				Michael Reagan	
				Paul Syers	
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Genealogy	Frank Warren	(908) 756-1681			
Hardware	Mike Reagan				
Investing	Jim Cooper				
Java	Michael Redlich	(908) 246-0410			
Layman's Forum	Matthew Skoda	(908) 359-8842			
LUNICS	Andreas Meyer				
Mobile Devices	Brenda Bell				
NJ Gamers	Gregg McCarthy				
Web Browser	David McRitchie				
WebDev	Evan Williams	(908) 359-8070			
Window Pains	John Raff	(973) 533-0664			
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			Membership	Bob Hawes	
			Newsletter	Bob Hawes	
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ACGNJ News

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Submissions: Articles, reviews, cartoons, illustrations. Most common formats are acceptable. Graphics embedded in the document must also be sent as separate files. E-mail submissions to newsletter@acgnj.org preferred. **Always confirm.** Date review and include name of word processor used, your name, address and phone and name, address and phone of manufacturer, if available.

Tips for reviewers: Why does anyone need it? Why did you like it or hate it? Ease (or difficulty) of installation, learning and use. Would you pay for it?

Advertising: Non-commercial announcements from members are free. Commercial ads 15 cents per word, \$5 minimum. Camera ready display ads: Full page (7 x 10 inches) \$150, two-thirds page (4.5 x 10) \$115, half-page \$85, one-third \$57, quarter \$50, eighth \$30. Discount 10% on 3 or more consecutive insertions. Enclose payment.

Publication Exchange: Other computer user groups are invited to send a subscription to ACGNJ at the address below. We will respond in kind.

Address Changes should be e-mailed to membership@acgnj.org or sent to ACGNJ at the address below.

Membership: Regular (now includes *all* family members who reside at the same address): 1 year \$25, 2 years \$40, 3 years \$55. Student: 1 year \$20. Senior Citizen (over 65): 1 year \$20, 3 years \$45. Send name, address and payment to ACGNJ, PO Box 135, Scotch Plains NJ 07076.

Typographic Note: This ACGNJ News was produced using Scribus 1.3.3.13. Font families used are Times New Roman (TT) for body text, Arial (TT) for headlines.

E-Mail Addresses

Here are the e-mail addresses of ACGNJ Officers, Directors and SIG Leaders (and the Newsletter Editor). This list is also at <http://www.acgnj.org/officers.html>.

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President's Note

Michael P. Redlich

January 2015

On behalf of the ACGNJ Board of Directors, I would like to wish everyone a very Happy New Year! We hope you all had a wonderful Holiday season and look forward to seeing you at all of the club events this year and at the Trenton Computer Festival on March 21.

On December 5, 2014, we held our annual Business Meeting that included elections of Officers and Directors. All of the incumbents whose tenure was expiring at the end of December 2014 were re-elected. The updated list of Officers and Directors was shown on page 1 (and also on page 2).

As you can see, we have a full Board of Directors. You may recall we had two (2) vacant Director positions open last year. The first was filled at the September 5 Board of Directors meeting with the appointment of Scot Jenkins, who accepted the Director position that expires in December 2015. Scot is a relatively new member and, in his short

time with us, he has already been a very active member of the club with his contributions. His enthusiasm is contagious.

Paul Syers added his name to the election slate for the remaining Director position and was, of course, ultimately elected to that position. His term expires in December 2016.

One of the changes that you will see in 2015 will be with the Board of Directors meetings. On the even months, we will meet on the Tuesday before the Main Meeting and, on the odd months, we will meet on the night of the Main Meeting with a start time of 7:00pm. The only exception to this new schedule is this month's meeting which, due to the New Year's Holiday, will be scheduled on Tuesday, January 6, 2015.

As always, please check the ACGNJ web site, <http://www.acgnj.org/>, for the latest news.

ACGNJ Investment Meeting SUMMARY (Dec. 11, 2014)

Philip Lees, ACGNJ

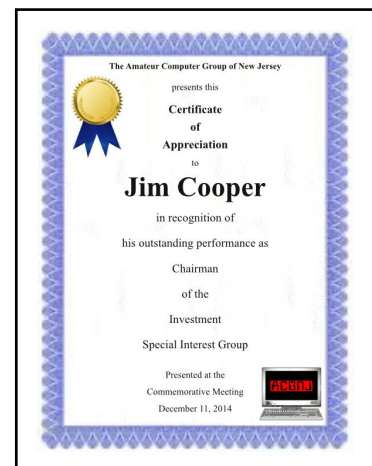
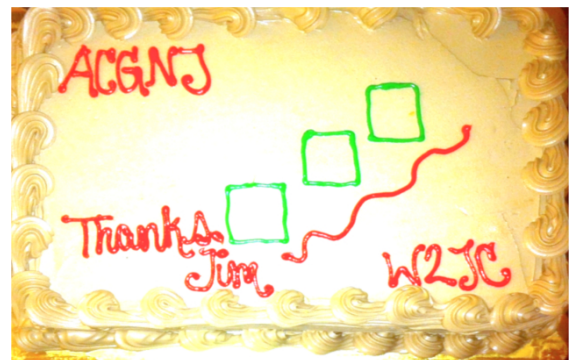
Well done everybody, we had another fun, very interactive meeting on Thursday, 12/11/2014 with **12** attendees.

John Valentine had asked to discuss the Haliburton stock (HAL) and its chart. The chart was examined thoroughly, identifying prior support and resistance levels, and, after the prior levels were able to be plotted (minimum 2 points), it was quite uncanny how frequently the same levels acted as support and/or resistance at a future time. Thank you John for the request as this chart and the oil-related analysis that we did on it was fantastic. This stock had a lot of good talking points.

To finish-up, we gave a "thank you" recognition to Jim Cooper for everything that he does for the group on a month-to-month basis. He was presented with a certificate, a cake and some coffee. On that note, thank you to everyone who contributed towards it.

In the New Year, I would like us to get 15-20 attendees on a consistent basis. Please try to attend, it's fun and learning about trading and/or investing is VERY important for your future.

Thanks again to everybody who attended, it looked like everybody enjoyed it. We hope to see you at January's early meeting, **1/8/2015**. Thank you. Philip Lees



Mobile Devices Meeting Report

Brenda F. Bell, ACGNJ

The topic of the December Mobile Devices Meeting was the Barnes & Noble Nook -- specifically, the Samsung Galaxy Tab 4 for Nook (a B&N-branded and -configured Samsung tablet). There wasn't a formal presentation, but a few issues were discussed with respect to upgrading from previous Nook devices and from the way the built-in Nook app handles on-device book storage.

We had 5 people present (Brenda and Wendy Bell, Dave McRitchie, Malthi Masurekar, Mike Reagan). Wendy procured the guest presenter (and potential

recruit), Wil Minggia from the Bridgewater Barnes & Noble.

In Random Access, we discussed Android phones (including the HTC One Max and the Droid Turbo), the differences between KitKat 4.4.2 and 4.4.4, and terminal versions of operating systems for specific hardware. Malthi brought in her iPad Air. We showed her to search for apps on the App Store, but had trouble configuring her e-mail correctly. (We suggested she reach out to the techs at the Apple Store.)

ACGNJ Mini-Reports

Java Users Group Report

Mike Redlich, ACGNJ

Our December 9, 2014 meeting was billed as an Open Forum, but Barry Burd brought along a new "gizmo" to demonstrate - the new Project Tango device (<https://www.google.com/atap/projecttango/>).

The entire meeting time was spent trying to figure out how to capture and render data.

There were a total of six (6) attendees.

(Photo at right: Barry walking around the room, capturing data).



Main Meeting Report

Mike Redlich, ACGNJ

We had 11 attendees at our Main Meeting on December 5th. Due to a scheduling conflict, we held our monthly Board of Directors Meeting on the same night, starting at 7:00 PM. However, the Board Meeting went into overtime and we didn't start the Main Meeting until 8:30pm. The election slate, as presented, was passed. (See the announcement on page 1). By the time we wrapped up the Annual Business Meeting, it was already past 9:30pm, so we didn't have a chance to show any of the planned videos. We did, however, have a good discussion on what we, as the Board, have been doing and plans for next year.

Layman's Forum Report

Matt Skoda, ACGNJ

We had 2 attendees at our December 8, 2014 meeting, where we followed our usual random access format.

Computer Workshop Report

Bob Hawes, ACGNJ

We had 4 attendees at our December 13 meeting. Matt Skoda and I helped guest Nate Jacobs learn how to burn data files to a DVD. Mike Reagan brought in two fairly new but defective computers, hoping to merge them into one working computer.

Window Pains Report

Anonymous, ACGNJ

Possibly due to an attack of excessive Holiday Spirit, nobody bothered to send in a Window Pains Meeting Report this month.

Year End Review 2014

Bob Hawes, ACGNJ

Throughout the past year, I often had several different writing projects going on at once. Right now, I've got **four**. First, there's my multi-part *Distros Revisited* series. (The **sixth** part of which appeared in our November 2014 issue). Second is my multi-part *Still Too Big ???* series. (The first part of which appeared in our December 2014 issue). The third is **this** article, and the fourth is so-far unnamed. They are all somewhat interconnected; and sometimes things can get a bit jumbled. For instance, according to its title, this article should be concerned with my performance as Editor (and also Writer) in 2014. However, I already covered the first half of that year in my *Editorial History* article (in our July 2014 issue).

So half the work of **this** article has **already** been done. (Maybe this one will turn out to be reasonably short for a change. We'll see). I ended *Editorial History* by writing "That brings our June 2014 totals to **119** by me, **8** "member submitted", **4** letters, **11** President's Notes, **11** Investment SIG reports, **24**

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of 1980 and most of 1981, each issue had **more** than one Editor. (See *Editorial History* for the exact details). Also, please remember that **all** of the Editors before me had to contend with physically printing out the newsletters, labeling and stamping each issue, and then snail-mailing them to all of the members. (Or, at least, arranging for somebody else to do so). Even Barbara had to contend with this process during her first seven years. Back then, it was a **much** harder job.

Note that there are some people who, it might be argued, could be recognized as the (possibly mis-credited) Editor for **one** single issue: Judy Taylor (for *October/December 2011 Supplement*, also known as *October 2011 Special Security Edition*), myself (for *End-of-June 2008 Supplement*, which **was**, in fact, totally my own project), Walter D'Ull (who credited himself as Editor/Publisher in our first 1995 issue), and there may be others. (After all, we're still missing a total of eight newsletters from 1975, 1976, 1984 and 1985). However, it seems to me that a person **can't** be counted as the full-time

Mini-Reports and **117** foreign". (For additional details, refer back to *Editorial History*. Plus, if you're **really** a "glutton for punishment", see *Year End Review* in our December 2013 issue for an even more detailed run-down and count-up of the articles that I wrote during 2012 and 2013).

Here, repeated from *Editorial History*, are the ten previous ACGNJ Newsletter Editors, sorted by length of service:

Brian Boccardi: 9 months

Joe Tomalesky: 11 months

Alice Levenson: 11 months

Tom Milkowski: 1 year, 1 month

Sol Libes: 2 years

Neil Sanford: 3 years

Alex Goldfinger: 3 years, 8 months

Russell Gorr: 4 years

Fred Gohlke: 4 years, 8 months

Barbara DeGroot: 17 years

Math fans among you will have noticed that those terms of service **don't** add up. That's because, for all

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Editor if he or she only produced **one** issue. I'd say that, by definition, "full-time" means "continuous", and thus implies multiple issues. (Hopefully, this quibble will cover us under any circumstances that might arise in the future).

In addition, there have been three people credited as Publisher. Bob Todd took the job first, in March of 1990, and served through the last issue of 1994. Walter D'Ull took the job with the first issue of 1995, and held it until January of 1996. Milton Astroff took the job in February of 1996, and held it until June of 2000. Presumably, they helped to get the newsletter "out the door". Maybe by doing some of the actual work, or maybe by coordinating the work of others. Whatever they did, I'm sure it was appreciated. Coincidentally (???), the first newsletter in over ten years that **didn't** list a Publisher (September of 2000, following the then-usual two-month summer hiatus) was also the very first issue to include an online PDF version containing **live links**.

OK. Enough digression. Let's get back to me. Right now, with three years and one month as full-time

Editor under my belt, I've already surpassed six of my ten predecessors; with four more to go. In another two years, I'll have outlasted everybody but Barbara. To even *tie* her seventeen year record, I'll have to stay on the job until I'm *eighty* years old. (So at least I've got a long-term goal).

Anyway, returning to our supposed point (my performance in the past year): Our July 2014 issue contained an article by me, two uncertain items, and two "foreign imports". (That's what we call articles originally published by other clubs. For the purposes of this article, I'll count them; but I won't name them here). Those uncertain items (ACGNJ HAS SUMMER ACTIVITIES and REMEMBER THESE DATES) were both written by me; but they were both "too small", so they *won't* be counted in my totals. There were also two SIG reports: Investment by Philip Lees, and Mobile Devices by Brenda Bell.

Our August 2014 issue contained an article by me, and two uncertain items (ACGNJ HAS AUGUST ACTIVITIES and REMEMBER THESE DATES). As in July, both were written by me, both were "too

small", and both were *not* counted. There were also a President's Note, three "foreign imports", an Investment SIG report by Philip Lees, and four ACGNJ Mini-Reports: Main Meeting on June 6, Java SIG on June 10, Window Pains (our Annual Planning Meeting) on June 20, and Java SIG on July 8. Incidentally, those three Mini-Reports from June were all *a month late*. Shame on us.

Our September 2014 issue contained an article by me, a President's Note, an Investment SIG report by Philip Lees, a Mobile Devices SIG report by Brenda Bell, and a "foreign import". It also contained two more original articles: HOPE X Review by Cass & Ruth Lewart, and THE NEW OUTLOOK PIONEERS' COMPUTER DONATION PROGRAM by Dr. Steve Palaszewski, President of the New Outlook Pioneers Morris Club. Now, Cass and Ruth are ACGNJ members, so their article is "member submitted"; but Dr. Steve is *not* a member. (He found our newsletter on the Internet and sent me an e-mail). For now, I'm classifying this article as "outside submitted". (Although I reserve the right to

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change it if I think of a better name later). That brings our September 2014 totals to **122** by me, **9** "member submitted", **1** "outside submitted", **4** letters, **13** President's Notes, **14** Investment SIG reports, **2** Mobile Devices SIG reports, **28** Mini-Reports and **123** foreign.

Our October 2014 issue contained two articles by me, and three uncertain items (Happy Halloween, New SIG Being Formed, and Filler Images). As in July and August, all three were written by me, all three were "too small", and all three were *not* counted. There was also a President's Note, two "foreign imports", an Investment SIG report by Philip Lees, three ACGNJ Mini-Reports (Main Meeting, Java SIG, Window Pains) and an article titled "Biographical Information for William R. "Bill" Cheswick (our Main Meeting speaker)". I got the information for that last article from the Internet. I'd guess that most of it came, directly or indirectly, from Bill himself. In *Editorial History*, I classified the two reports that I wrote in *End-of-June 2008 Supplement* (which had origins quite similar to this

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article) as "mostly foreign". (Which I later reduced to just "foreign"). Following that precedent, I'm classifying this article as "foreign" too, rather than "outside submitted". (At least for now).

Our November 2014 issue contained an article by me, two "foreign imports", two e-mails (which will be counted as "letters"), a Computer Workshop Meeting Report by Bob Hawes (me), an Investment SIG report by Philip Lees, a Mobile Devices SIG report by Brenda Bell, and three ACGNJ Mini-Reports (Main Meeting, Java SIG, Window Pains).

Our December 2014 issue contained an article by me, three "foreign imports", a Computer Workshop Meeting Report (which, due to space considerations, had to be grouped together with the Mini-Reports on page 3 of that issue), an Investment SIG report by Philip Lees, three ACGNJ Mini-Reports (Main Meeting, Java SIG, Window Pains), and an "Elections Are Here" announcement. I wrote that announcement by piecing together bits from Board e-mails and previous election announcements. Fortunately, it's "too small", so I don't have to count

it. That brings our December 2014 totals to **126** by me, **9** “member submitted”, **1** “outside submitted”, **6** letters, **14** President’s Notes, **2** Computer Workshop SIG Reports, **17** Investment SIG reports, **3** Mobile Devices SIG reports, **37** Mini-Reports and **131** foreign.

Well, that takes care of 2014. However, we’ve still got a bit of room left for some silliness.

Appendix I: The Jack Benny Joke Rides Again

(Imagine that someone is playing The William Tell Overture in the background. On a violin). In the late fifties and early sixties, my family (mother, father, brother, me) watched TV together at night. One of our favorite shows was The Jack Benny Program. In addition, one of the TV stations in our area played reruns of that show in the afternoon. My brother and I would often watch them. (Especially during inclement weather). Jack wasn’t afraid to make himself the butt of the jokes. I remember a sub-plot from one of his shows, involving a soap opera called The Mean Old Man. As the show progressed, various characters would talk about the latest episodes, and

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the only things some people remember about him are that he played the violin badly, and that he lied about his age. (Actually, in real life, he played the violin quite well). The age thing dates back to his radio show. According to a biography I once read, his radio character claimed to be in his mid-thirties at first, and every year, just like normal, he would add one year to his age. Until he’d spent a year as 39. Then, Jack and his writers agreed that, as an age, 39 was just flat out **funnier** than 40. So he stayed 39 from then on.

Recently, one of the Classic TV stations in our area began re-running Jack’s show, and my brother just happened to tell me that he was watching them. So, back in October, just before my 66th birthday, we were speaking on the phone. On a whim, I swiped a line that Jack had often used when his next birthday was approaching, and said; “Just think. In another few days, I’ll be 39”. He laughed, so I was satisfied that he got the joke; but I didn’t expect him to take it a step further. However, to explain what he did, I have to relate a family story.

wonder how anybody could make up stuff like that. In the end, it turned out that the writer was a tenant in a building owned by Jack, and he was just repeating what Jack had done to him.

Another plot involved a trip to France taken by Jack and Mary Livingston. (Mary was Jack’s wife in real life, but was his girlfriend on the show). At the beginning, Jack hired a Frenchman to teach him to say “I am Jack Benny, star of stage, screen and television” in French. Instead, the man taught him to say “I am Jack Benny. I drive a garbage truck”. So every time that Jack said it, his listeners would say “Pew”, hold their noses, and run away. Except for one man, who squealed in delight, and hugged him.

Unfortunately, I don’t remember the middle of that show, but I **do** remember the punchline. Somehow, Jack and Mary became stranded on a deserted street in the middle of the night. Suddenly, a giant garbage truck drove up, and the driver (the man from the beginning of the show) greeted him joyously. Then, he gave them a ride to their hotel.

Sadly, Jack has been gone for forty years now. So

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I think that the incident I’m about to describe took place on my cousin Rob’s 40th birthday, but I can’t remember for sure; and oddly enough, neither can anybody else. So I can’t say exactly how many candles were on the big, rectangular homemade cake that we had. (It could easily have been more than 40, but probably **not** less). For this reminiscence, we’ll pretend that my recollection is correct. Anyway, when the “birthday boy” tried to blow out the candles, they **wouldn’t** go out. They were those trick candles (which can only be put out individually, by hand). As you might imagine, that amount of candles gave us quite a conflagration.

Belatedly realizing this tactical error, we snapped into action and began snuffing out candles. (I think there was only room for two or three of us to get close to the cake at the same time). Anyway, by the time we got all the candles out, they had mostly burned down to stumps, and the top of the cake was covered with melted wax. (The cake **did** survive, but it took a **long** time for us to pick off all of that wax). Anyway, we learned our lesson from this “case of

arson”, and never tried to use the actual number of candles again. Instead, we went symbolical. For, say, somebody's 43rd birthday, we'd use two groups of candles. Four in the first group, three in the second.

Now, back to the present. On the day of my birthday, my brother brought me a cake with 12 candles, arranged in four columns of three candles each. So

they could be viewed as two groups of 6 candles, representing my real age of 66. However, there was a slightly wider gap between the first column and the other three. So they could also be viewed as a group of 3 candles and a group of 9 candles. Thus representing my joke age of 39. What can I say? Sheer genius. See you next month. ☺

Image Processing Software, Part 3

Dick Maybach, Member, Brookdale Computer Users' Group, NJ

Newsletter: BUG Bytes (www.bcug.com) n2nd (at) att.net

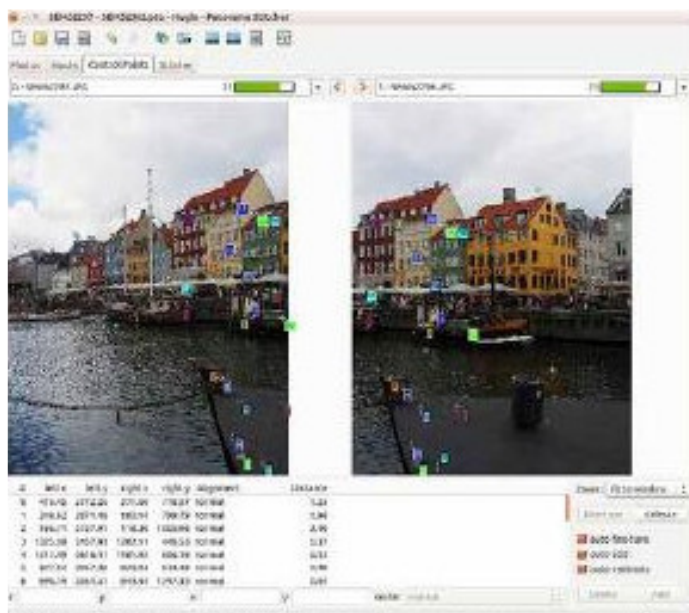
(See our October 2014 issue for Part 1)

(See our December 2014 issue for Part 2)

In the two previous parts, I discussed basic image processing with free software, and in this article I'll cover two specialized techniques, panoramic and high dynamic range (HDR) images. Both involve combining several separate images into one.

Hugin (<http://hugin.sourceforge.net/> available for Linux, OS X, and Windows) is my preferred tool for creating panoramas. The screen-shot shows two of the six frames that I stitched together to create a panorama. In previous screens, I selected the images and told Hugin to create control points (points in different images that should coincide on the panorama). These appear as crosses identified by numbers in squares. The table below the images

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Screenshot of the Hugin graphical user interface in Ubuntu Linux, showing how well 2 images align before making a panorama from them.

shows the offset distances (in pixels) between the points when they are overlaid. The green bar above the images indicates that Hugin is happy with the alignment; however, I had to eliminate several points to get this approval. If the number had become too small, I could have added more by hand, but this is tedious and fortunately is seldom necessary.

The resulting panorama appears below, although I adjusted the brightness and contrast with RawTherapee and GIMP after Hugin had finished with it. The Olympus bundled image processor also creates panoramas as do many modern cameras, but I find that often the results from Hugin are far superior. Hugin doesn't understand raw, so you must develop your images before using it. Although most panoramas are one-dimensional, that is composed of a single row of images, Hugin can create two dimensional ones, made from multiple rows of images. You also can choose from several different projections when creating the final image.

High Dynamic Range (HDR) photography attempts to overcome the dynamic range issue. You are probably disappointed with some of your pictures where the blue sky and white clouds have become a uniform pure white, and you can see nothing the shadows, which have become pure black. While recording in raw format can help some, it too has



A panorama image Dick produced using the Hugin program.

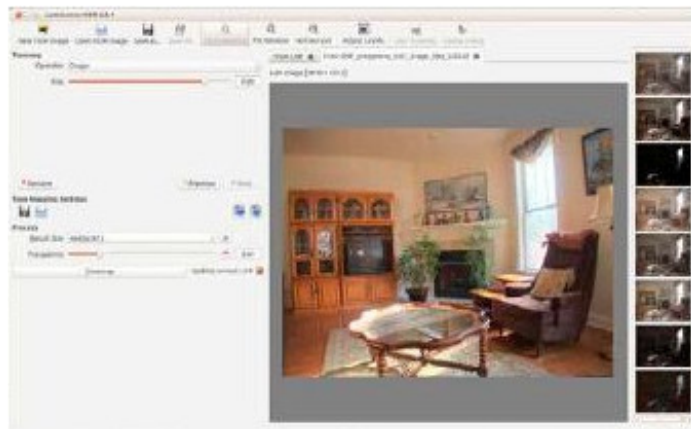
much less dynamic range than our eyes. The solution is to take several pictures of the same scene with different exposures. Some will have the highlights properly exposed (but the shadows will be black) and some will show what is in the shadows (but the highlights will be white). We then use clever software to combine these so that a single image shows both the highlights and the shadows. The problem is that there is no way to display the result, since the usual media (computer displays and paper prints) all have severely limited dynamic range. Thus we must perform tone mapping, which decreases the exposure of the highlights and increases that of the shadows and yet doesn't cause color shifts or other unpleasant effects. If done properly, the result is a low dynamic range image that looks close to what our eyes saw originally. If done improperly, the result can be a caricature, more artistic than realistic. Many modern cameras can perform HDR processing directly, but as with panoramas, adding human judgment to the process often greatly improves the result.

The screen-shot shows Luminance HDR (available

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better by using Hugin to align the images and create a floating-point HDR file, which I then input to Luminance HDR for tone mapping. I assume this is because in Hugin I can optimize the control points, where using Luminance HDR everything is automatic.

The screen-shot shows the last step in the creation of the image. In previous screens I selected the files, let



A screenshot of Luminance HDR working on a high-dynamic-range image, which was created by combining 5 raw images with different exposures.

for Linux, OS X, and Windows) working on a high-dynamic-range image, which was created by combining five raw images with different exposures (-2, -1, 0, +1, and +2 EV). The camera was hand-held, and the auto-alignment feature of Luminance was used to align them. Compare this to the LightZone screen-shot in my March 2014 article and you can see that the exposure of the room here is much better and that through the window is marginally so. (This isn't because of a shortcoming of LightZone, which after all had only a single image to work with.) More exposures covering a wider range than four f-stops would have produced a better image. As with LightZone, Luminance HDR has no provision for correcting distortion, so further processing with GIMP (or pre-processing with RawTherapee) is needed. Also, if you look carefully at the edges of the image, you can see where the images did not line up. Again, a light cropping with GIMP would remove this.

In some cases, I've found that although Luminance HDR uses the Hugin algorithm to align the input images, the alignment isn't that good. I can often do

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the program align them, and created a high-dynamic-range image. This screen shows the tone mapping, where the dynamic range is compressed so that it can be displayed using a low-dynamic-range medium such as a display or a print. The thumbnails along the right allow selection of the mapping algorithm, and each has a different set of controls, shown on the left. Drago processing, shown here, has only two parameters, which makes it quick to adjust. The strength and the weakness of Luminance HDR is the freedom to choose from eight algorithms and your control over the parameters of each. Knowing the best algorithm for each image and developing a feel for how the parameters affect the tone mapping takes a good bit of experience. Those used to the hand-holding provided by commercial software will find their initial experiences frustrating. HDR photography is tricky and tedious, and works only in special cases. For example, outdoor pictures with large areas of foliage in the foreground are seldom satisfactory, because the leaves are always being blown about, and this makes it impossible to

align the individual images. Luminance HDR has an anti-ghosting feature to overcome this problem, but it works best when the motion is confined to a small area. If you think you have a situation that calls for this technique, go ahead and take your pictures with their bracketed exposures. Before you start the HDR process though, select just one or these images and develop it carefully with the tone-mapping features of RawTherapee or LightZone. I often find that the result is just fine.

Expect some frustration from your first digital image processing efforts. It was a big day for me when I could consistently obtain results that were as good as the JPEG images straight from the camera. I find it helpful to display a camera JPEG image to which I can compare the one on which I'm working. It's easy to go seriously wrong, one small logical step at a time, if you work without a reference.

References:

Montabone: Beginning Digital Image processing Using Free Tools for Photographers, which I referenced in the previous article, also discusses Hugin and Luminance HDR. He refers to the latter by its original name, qtpfsqui.

<http://www.cambridgeincolour.com/> – contains many very valuable tutorials on photography and image processing. I also referenced this in the previous article, but I mention it again because it includes HDR and panoramic techniques.

<http://hugin.sourceforge.net/tutorials/index.shtml> has several tutorials on using Hugin.

Bloch: The HDRI Handbook 2.0 – is comprehensive discussion of HDRI theory and processing, geared toward commercial software and includes a DVD with free and trial commercial software. The author does not care for Luminance HDR, but he is a professional for whom throughput is more important than cost.

<http://blog.patdavid.net/2013/05/hdr-photography-with-foss-tools.html> – is a very helpful guide to the tone mapping tools in Luminance HDR.

“HDRI Photography” at makeuseof.com is a good introduction to the topic and to Luminance HDR:

<http://www.makeuseof.com/pages/download>

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What Exactly Is Linux

Stuart Jones, MD, Member, Lehigh Valley Computer Group, Pennsylvania

Newsletter: The LVCG Journal (www.lvcg.org) [stujonesmd \(at\) gmail.com](mailto:stujonesmd@atgmail.com)

Everybody who has used a personal computer (PC)—desktop, laptop, notebook, and tablet, whatever—knows about Windows. Microsoft Windows, to be exact. Most of the PC's in the world use Windows as their ‘operating system’. As many know, a computer system is made of hardware (the actual machinery—the physical computer) and software (the instructions installed into the hardware to make it work). The ‘operating system’ is the most basic part of software—the software that manages the physical computer so that other programs (so-called ‘applications software’) can make the computer do things that are useful to human beings. For most people, these useful things involve looking up information on the Internet, sending and receiving electronic mail, writing and printing documents, and playing computer games. Most computer users can

be happily unaware of what is going on inside their computer, and this is as it should be. A computer, like a toaster, should ‘just work’. Though we hear the most about computers when they don't work as they should, for the most part, they do. Microsoft Windows can take some credit for this reliability, though this has depended in part of which version of Windows is being used (the best, by far, has been Windows 7).

Since Windows works so well for so many people, why would anyone wish to use a different operating system? Up to now, most people haven't bothered. A few know that a copy of Windows on your computer costs up to \$100, but they are used to paying \$400 and up for a computer, and that cost is built into the overall price. Having learned since 1995 how to use any version of Windows, folks are not eager to learn

a new way of doing things. A very few people who know a bit more about computers are not happy with the way Microsoft has run their part of the computer business, but for the most part, these folks are ignored by the rest of us.

However, a VERY small group of VERY well educated computer people had complained very loudly for decades about how Microsoft had dominated the operating system business, and how poorly various versions of Windows have worked...from their expert perspective. Another small group of computer experts years ago decided to develop their own computer operating system. This group was led by Richard Stallman, who is best known for his assertion that ALL software should be distributed including its source code (the original computer language text that defines what the software is and does). His group developed a set of outstanding programming tools (programs used to develop other programs, but had difficulty developing their own operating system (GNU). In 1991, this crowd was joined by a computer science

major from the University of Helsinki, Finland, named Linus Torvalds. He had written a personal version of an operating system, modeled on an operating system called 'UNIX', which had been built for the very large computers of the 1970's and 1980's. Linus spread his new program over the Internet to a worldwide group of similarly inclined programmers, who dubbed the results 'LINUX', in his honor. (Since Linus and others used the GNU tools, their operating system is sometimes called 'GNU-LINUX, to give well-deserved credit to Stallman's group.)

At first, LINUX was very limited compared to Windows. However, since LINUX cost nothing, and could be downloaded and modified freely, it became popular among computer experts, who formed an international community around improving LINUX. Similar programmer communities developed other free and open software projects, which came to include many types of programs usually (in the Windows world) sold for profit. In addition, software was added to the LINUX project that

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created the same sort of 'user interface' (the method people use to make the computer do things) that was provided by Windows (as well as the Apple Macintosh operating system, OS/X)—that is, using icons, a mouse, and keyboard, as well as video graphics (the so-called 'GUI'—Graphical User Interface). The number of computer programmers working on free software projects rapidly increased to number over 100 million people, located everywhere reached by the Internet (which, as we know, now covers nearly all of our planet).

Until recently, this meant little or nothing to most computer owners. However, Microsoft, in perhaps the most stupid business decision ever seen in the software business, first published a new version of Windows (Windows 8) which drastically changed the user interface, to the dismay (and LOUD complaints) of everyone buying a new computer with this installed. They then compounded this idiocy by announcing and enforcing (by frankly unethical actions) 'end of life' for the Windows XP

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version that was still being used by the majority of computer owners, to force all of them to buy a newer version. They then made the situation far worse by insisting that all these folks change to Windows 8, even though nearly all preferred Windows 7 (which kept the old user interface), and keeping the price of a Windows 7 license higher than one for Windows 8 (\$90 minimum, PER COMPUTER). As of April, 2014, Windows XP was no longer updated and supported by Microsoft. This means that anyone still using XP will be in danger of having their computer afflicted with viruses and other malware, and of having their personal data stolen by the criminals who create this garbage.

Add to all this the ongoing economic crisis of 2008 to the present, there are a lot of computer owners who can ill afford the expense of a Windows upgrade, particularly if (as many do) they have 2 or more computers in their household. Fortunately for them, and for all other disgruntled current Microsoft Windows owners (dare we call them victims?),

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LINUX presents a really excellent alternative. Relatively few, unfortunately, have heard about LINUX, and those who have mostly think that it is strictly for computer experts (the so-called 'nerdocracy'). Due to the efforts of those millions of free software programmers, this is no longer true. There are versions of LINUX that install more easily than Windows, run faster on the same computer hardware, and are EASIER to use than Windows 7, let alone 8. The author's current favorite version is Zorin LINUX, which can even be set up to LOOK like Windows XP or Windows 7.

Even those who know more about LINUX may be confused by the enormous (several hundred at last count) versions of LINUX plus additional programs that are available as 'distributions'. Each of these 'distros' combines the LINUX operating system proper with many additional programs that manage the user interface, and also take care of tasks for which Windows users habitually pay \$30-\$50 (apiece!!) for a program package dedicated to each function (such as listening to music, burning CD's

and DVD's, and performing office tasks). Each distribution is put together by a team of programmers (and user interface designers, artists, and documentation writers) who choose what will be included and how it will all work together. The result of their efforts is a package of software that can be run (without being copied to hard disk storage) 'live' on any recent PC, or installed on that PC either replacing Windows, or alongside Windows. (In this last case, the user chooses which operating system to use when the computer starts up or restarts.) There are special distros designed to be run on old older equipment (as old as Intel 486 class!), netbook computers, and even exotic computers that aren't, strictly speaking, PC's. In fact, the Android operating system run by most cellular phones and tablet computers is a distro of LINUX, and there is even a distro designed for the XBOX gaming system, that turns this into a full-fledged computer usable for most PC tasks. The server computers that run the Internet (about 95% of them) run LINUX, as do some of the very large IBM computers used by

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banks and stock exchanges. As this is written, if you include all the tablets and cell phones, there are many MORE computers in the world running LINUX than run Windows!

LINUX is, without a doubt, the largest little-known phenomenon in high technology, and really, ENORMOUSLY, deserves to be better known by ordinary people. Because of the enormous networks of volunteers and paid experts who contribute to the LINUX project, as well as the thousands of other free and open software projects around the world, there is an absolutely HUGE community of LINUX experts available to help other folks who would like to use this software on their PC's, alongside or instead of Windows. Help is available via the Internet from numerous websites, and also from many regional and national LINUX user groups. Paid assistance for LINUX users is also available, from consultants and also from large organizations (including IBM!). Entire countries (including, at present, mainland China (!) and the Russian

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Republic) have adopted LINUX as their official government operating system, and a number of medium sized cities across the world have also done so.

Though Microsoft Windows (especially after the company retreats from its current idiocy, which seems imminent) will still have a large presence on PCs, it appears that LINUX will conquer a large segment of the PC market, and therefore will soon assume a much larger role in personal computing at the desktop and laptop level. Regardless, LINUX will continue to be developed by its various programmer communities, and will continue to power the Internet, cellular telephones, and a host of other 'smart devices' (such as automobiles), the owners of which will likely remain blissfully unaware that they are using LINUX.

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SIG News

LUNICS (Linux/Unix)

Andreas Meyer (lunics@acgnj.org)
<http://www.acgnj.org/groups/lunics.html>

LUNICS is a group for those who share an interest in Unix and similar operating systems. While we do quite a bit with Linux, we've also been known to discuss Solaris and BSD as well. Recent meetings have followed a Random Access format. See our web page for further information. (We meet on the first Monday of each month, at 8:00 PM). ☐

Main Meeting

Evan Williams (president@acgnj.org)
<http://www.acgnj.org/groups/mainmeet.html>

We meet on the first Friday of the month, at 8:00 PM. Each December, this meeting includes our Annual Business Meeting and Officer Elections. *No* meetings in July or August. ☐

Layman's Forum

Matt Skoda (som359@gmail.com)
<http://www.acgnj.org/groups/laymans.html>

This SIG discusses issues of interest to novice users or those planning to get started in computing. Watch our Web page for updates and announcements. We meet at the same time as the Hardware Workshop. (On the second Monday of the month, at 8:00 PM). *No* meetings in July and August. ☐

Hardware Workshop

Mike Reagan (hardware@acgnj.org)

This group is dedicated to repairing, refurbishing and/or recycling older computers. Ten people attended the first meeting, so there is still a market for this type of event. Although we looked at some of the older equipment stored in the back room, most of our time was spent in talking about past experiences and planning for the future. Hopefully, we can establish a viable long-term schedule of projects, and keep the interest of those who attended this inaugural meeting. If you have a hardware problem, bring it in and we can all help fix or demolish it. (No guarantees either way.) We meet at the same time as the Layman's Forum. (On the second Monday of each month, at 8:00 PM). ☐

Java

Mike Redlich (mike@redlich.net)
<http://www.redlich.net/javasig/javasig.html>

This SIG covers beginner, intermediate, and advanced level Java programming. Primary focus is on developing useful/practical applets and applications. (We meet on the second Tuesday of each month, at 7:30 PM). ☐

Mobile Devices

Brenda Bell (mobdevsig@acgnj.org)

The Mobile Devices SIG focuses largely on current-generation cellphones and smart phones (such as Blackberry, Android, iPhone) which bridge the gap between basic cell phones and traditional computers, and how they can help you manage and organize your life. Our membership ranges from those who have recently acquired their first, basic cellphone to those who develop applications for today's modern smart phones, iPods, and ultra-portable computers. While we expect to spend much of our time investigating the built-in features and specialized applications available to modern smart phones, if you bring your basic (or multimedia) cell phone, iPod, or other mobile device with questions on how to use it, where to find applications, or what features they have, we are always happy to help! Meet and greet and plan where this event goes. Bring all your ideas, PDAs, fancy phones, etc. (We meet on the second Wednesday of alternate months (we get the even ones), at 7:30PM). ☐

WebDev

Evan Williams (webdev@acgnj.org)

This SIG is an open forum for all Website Development techniques and technologies, to encourage study and development of web sites of all kinds. All languages will be considered and examined. The current project is a CMS for the club. Anyone interested in starting a new project, come to the meeting and announce/explain. Provide as much detail as possible. WebDev should be an all-encompassing development and examination forum for all issues, applications, OS, languages and systems one can use to build Websites. We currently

have two web development language SIGs: .NET and Java; but other languages and OS need to be investigated, examined and tested; Windows, Linux, UNIX, DEC, Vax, HP etc. Intel-PC, Motorola - MAC etc. (We meet on the second Wednesday of alternate months (we get the odd ones), at 7:30 PM). ☞

Investment Software

Jim Cooper (jim@thecoopers.org)

http://www.acgnj.org/groups/sig_investment.html

The Investment SIG continues with presentations on how to use analysis programs TC2000 and TCNet. Large charts are presented on our pull down screen and illustrate the application of computer scans and formulas to find stocks for profitable investments. Technical analysis determines buy points, sell points and projected moves. Technical analysis can also be used on fundamentals such as earnings, sales growth, etc. We're no longer focusing on just Telechart. If you are using (or interested in) Tradestation, eSignal, VectorVest, or just in learning how to select and use charting and technical analysis, come join us!! (We meet on the second Thursday of the month, at 8 PM). ☞

NJ Gamers

Gregg McCarthy (greggmajestic@gmail.com)

<http://www.NJGamers.com>

www.lanparty.com

The Friday Night Frag starts at 6:00 PM on the second Friday of each month, and keeps going until 12 Noon on Saturday - 18 hours for 5 bucks!

BYOC - Bring your own computer.

BYOF - Bring your own food.

And if you don't like sitting on metal folding chairs...

BYO chair! ☞

Web Browser (Formerly Firefox)

David McRitchie (firefox@acgnj.org).

This SIG is an open forum for all Firefox and Mozilla techniques and technologies, to encourage study and development of web sites of all kinds. All browsers will be considered and examined. All members and guests are invited to check out the design concepts and voice their opinion. (We meet on the third Monday of each month, at 7:30 PM). ☞

C/C++ Programming

Bruce Arnold (barnold@ieee.org)

<http://acgnj.barnold.us/index.html>

This is a forum for discussion of programming in general, beginning and intermediate level C, C++, C-Win programming, hardware, algorithms, and operating systems. We demonstrate real programming in a non-intimidating way, presenting complete code for working programs in 3-5 sheets of paper. (We meet on the third Tuesday of each month, at 7:30 PM). **No** meetings in July or August. ☞

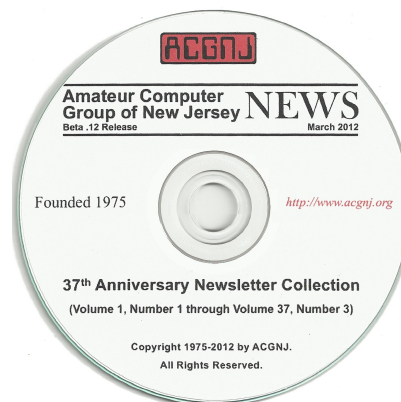
Window Pains

John Raff (jraff@comcast.net)

<http://www.acgnj.org/groups/winpains.html>

Intended to provide members with Windows oriented discussions, Microsoft and Linux style. Directed to more technological level of attendee, but newbies are welcomed. (We meet on the third Friday of the month at 8:00 PM). **No** meetings in July or August. ☞

37th Anniversary Newsletter CD Now On Sale



Beta .12 Release.

\$8.00, including postage.

(\$7.00 if you pick up a copy at a meeting).

Get yours today!

Back Issues Still Needed

Our collection remains incomplete. Below is a list of missing newsletters. Anyone who lends us one of these (or supplies a good clear copy) will receive the next CD as our thanks.

1975: #2 and #3 (dates uncertain).

1976: January.

1984: August.

1985: June, July, August, September. ☞

Guru Corner

If you need help with any of the technologies listed below, you can call on the person listed. Please be considerate and call before 10 PM.

Software

HTML	Mike Redlich	908-246-0410
	Jo-Anne Head	908-769-7385
ColdFusion	Jo-Anne Head	908-769-7385
CSS	Frank Warren	908-756-1681
	Jo-Anne Head	908-769-7385
Java	Mike Redlich	908-246-0410
C++	Bruce Arnold	908-735-7898
	Mike Redlich	908-246-0410
ASP	Mike Redlich	908-246-0410
Perl	John Raff	973-560-9070
	Frank Warren	908-756-1681
XML	Mike Redlich	908-246-0410
Genealogy	Frank Warren	908-756-1681
Home Automation	Frank Warren	908-756-1681

Operating Systems

Windows 3.1	Ted Martin	732-636-1942
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ACGNJ T-Shirts For Sale



(Front)



(Back)

L, XL: \$15.00

M: 2 for \$15.00

bob.hawes (at) acgnj.org

ACGNJ MEMBERSHIP APPLICATION

Sign up online at <http://www.acgnj.org/membershipApplication.html> and pay dues with PayPal.

US/CANADA		Dues	
		STUDENT	SENIOR CITIZEN (Over 65)
1 Year	\$25	\$20	\$20
2 Years	\$40		
3 Years	\$55		\$45

Mail this application and your check to:
 AMATEUR COMPUTER GROUP OF NEW JERSEY, INC., P.O. BOX 135, SCOTCH PLAINS, NJ 07076

☐ New Member ☐ Renewal ☐ Address Change

First Name _____ Last Name _____ Phone _____

Mailing Address _____ E-Mail _____

City _____ State _____ Zip _____ URL _____

What topics would you like to see covered at club meetings? _____

Other Local Computer Groups

Princeton Macintosh User Group: 7:15 pm 2nd Tuesday, Jadwin Hall, A-10, Washington Rd, Princeton, (609) 252-1163, www.pmug-nj.org	Linux Users Group in Princeton: 7 pm, 2nd Wednesday, Lawrence Branch Mercer Library, Rt#1 & Darrah Lane, Lawrence NJ http://www.lugip.org	New York PC: 3rd Thurs, 7 pm, PS 41, 116 W 11th St. For info call hotline, (212) 533-NYPC, http://www.nypc.org
Computer Education Society of Philadelphia: Meetings & Workshops at Jem Electronics, 6622 Castor Ave, Philadelphia PA. www.cesop.org/	Brookdale Computer Users Group: 7 pm, 3rd Friday, Brookdale Community College, Bldg MAS Rm 100, Lincroft NJ. (732)-739-9633. www.bcug.com	NJ Macintosh User Group: 8 pm, 3rd Tuesday, Allwood Branch Library, Lyall Rd, Clifton NJ. (201) 893-5274 http://www.njmug.org
PC User Group of So. Jersey: 2nd Mon., 7 pm, Trinity Presb. Church, 499 Rt 70 E, Cherry Hill, NJ. L. Horn, (856) 983-5360	Hunterdon Computer Club: 8:30 am, 3rd Sat, Hunterdon Medical Center, Rt 31, Flemington NJ, www.hunterdoncomputerclub.org , (908) 995-4042.	NY Amateur Computer Group: 2nd Thurs, 7 pm, Rm 806 Silver Bldg, NYU, 32 Waverly Pl, NYC. http://www.nyacc.org
Morris Micro Computer Club: 7 pm 2nd Thurs, Morris County Library, Hanover Ave, Morristown NJ, (973) 267-0871. http://www.morrismicro.com	Central Jersey Computer Club: 8 pm, 4th Friday, Rm 74, Armstrong Hall, College of NJ. Rich Williams, (609) 466-0909.	NJ PC User Group: 2nd Thurs, Monroe Rm at Wyckoff Public Library, 7 pm. Maureen Shannon, (201) 853-7432, www.njpcug.org
Philadelphia Area Computer Society: 3rd Sat, 12 noon Main Meeting, groups 8 am-3 pm. Upper Moreland Middle School, Hatboro PA. (215) 764-6338. www.pacsnet.org	NJ Computer Club: 6:15 pm, 2nd Wednesday except Jul & Aug, North Branch Reformed Church, 203 Rt 28, Bridgewater NJ. http://www.njcc.org	Princeton PC Users Group: 2nd Monday, Lawrenceville Library, Alt Rt 1 & Darrah Lane, Lawrenceville, Paul Kurivchack (908) 218-0778, http://www.ppcug-nj.org

Classified

FREE TO MEMBERS. Use our classified ads to sell off your surplus computer stuff. Send copy to Classified, ACGNJ NEWS, P.O. Box 135, Scotch Plains NJ 07076 or e-mail to the editor: [editor\(at\)acgnj.org](mailto:editor(at)acgnj.org). Classified ads are free to members, one per issue. Non-members pay \$10. Send check payable to ACGNJ Inc. with copy. Reasonable length, please.



Radio and TV Programs

Computer Radio Show, WBAI 99.5 FM, NY, Wed. 8-9 p.m.

Software Review, The Learning Channel, Saturday 10-10:30 p.m.

On Computers, WCTC 1450 AM, New Brunswick, Sunday 1-4 p.m. To ask questions call (800) 677-0874.

PC Talk, Sunday from 8 p.m. to 10 p.m., 1210 AM Philadelphia. 1800-876-WPEN



Directions to Meetings at Scotch Plains Rescue Squad, 1916 Bartle Ave., Scotch Plains NJ

From New York City or Northern New Jersey

Take Route 1&9 or the Garden State Parkway to US 22 Westbound.

From Southern New Jersey

Take Parkway north to Exit 135 (Clark). Stay on left of ramp, follow circle under Parkway. Bear right to Central Avenue; follow to Westfield and under RR overpass. Left at light to North Avenue; follow to light in Fanwood. Right on Martine (which becomes Park Ave). Right on Bartle Ave in middle of shopping district. Scotch Plains Rescue Squad (2-story brick) is located on the right. Do not park in the row next to the building. You'll be towed.

From I-78 (either direction)

Take exit 41 (Scotch Plains); follow signs to US 22. Turn right at light at bottom of hill and use overpass to cross Rt. 22. Follow US 22 Westbound directions.

From US 22 Westbound

Exit at Park Avenue, Scotch Plains after McDonalds on the right, diagonally opposite Scotchwood Diner on the left, immediately before the overpass. After exiting, turn left at the light and use overpass to cross US 22. Bear right at bottom of ramp to continue to south on Park Avenue. Turn left at the second light (a staggered intersection). Scotch Plains Rescue Squad (2-story brick) is on the right. Do not park in the row next to the building - you'll be towed. We meet on the second floor, entering by the door at the right front of the building.

From Western New Jersey

Take US 22 Eastbound to the Park Avenue exit. The exit is about a mile past Terrill Road and immediately past the overpass. Exit onto Park Avenue South and follow the directions above to the Rescue Squad building.